



Application Number 10/823,847

Claim listing:

Claim 1 (currently amended)

Claim 2 (canceled)

Claim number 1 (Currently amended): (Mike 8001 induction motor design)

What I claim as my invention is shown as Fig. 4 (Mike 8001 induction motor design), a new structure of the hermetic (or semi hermetic) refrigeration (or a/c) system. In this new design, the motor stator electrical winding and the stator body are left outside the dome. Rotor and compressor stay inside the dome; stator poles go through the dome to face the rotor directly (as shown in FIG.4-5). ~~The distance between stator pole and rotor is the same as before, motor efficiency is the same as before. Those connections between dome and stator poles are sealed; most likely they are welded together. The material of the part of the dome, where the dome gets stator poles go through, should be nonmagnetic (or diamagnetic) material; so the magnetic flux pattern in the stator will stay the same, motor will function the same as before. The gaps between the stator laminated pieces should be sealed; most likely they are welded together to prevent the leak of the high pressure refrigerant. This new design makes the dome a completely sealed space, no opening for electrical entrance, no possibility to leak refrigerant, no possibility to cause environmental pollution. The short circuit of the stator electrical winding will not burn the refrigerant. The troublesome stator electrical winding has been left outside the dome so we also~~

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~~can increase the system safety, durability, and reliability.~~

Claim 2 (canceled): (Mike 8002 stator design)